

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows.

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1 A mirror mounting button, windshield arrangement, comprising:

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5 a windshield, said windshield including an interior surface;

a nonelastomeric, thermosetting, structural adhesive in contact with and adhered to said interior windshield surface, said adhesive having a cure temperature below 325° F and a modulus of elasticity at 85° C of at least about 10,000 psi when cured; and

10 a mirror mounting button attached to said adhesive, whereby said cured adhesive forms an effective bond between said windshield and said mirror mounting button.

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1 The arrangement as set forth in claim 1 wherein said adhesive bond can support a weight greater than or equal to about 100 grams.

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C1 The arrangement as set forth in claim 2 wherein said adhesive is a modified epoxy.

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1 The arrangement as set forth in claim 3 wherein said adhesive is SCOTCH WELDTM AF-163-2.

C2

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1 The arrangement as set forth in claim ~~4~~ wherein
said adhesive is contacted with a latent accelerator
selected from the group including tolyl bis(dimethyl urea),
2-ethyl-4-methyl-imidazole and 1-phenyl-3,3-dimethyl urea.

5 ~~6-~~

1 The arrangement as set forth in claim 1 wherein
said mirror mounting button contains a perimetral groove
located at the outer perimeter of said button, whereby
excess adhesive applied to said button is contained within
5 said groove during bonding of said button to said glass
surface.

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1 The arrangement as set forth in claim ~~6~~ wherein
said adhesive is applied to a receptacle centrally located
in said mirror mounting button.

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1 The arrangement as set forth in claim 7 wherein
said adhesive bond can support a weight greater than or
equal to about 100 grams.

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① 1 The arrangement as set forth in claim ~~8~~ wherein
said adhesive is a modified epoxy.

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1 The arrangement as set forth in claim ~~9~~ wherein
said adhesive is ~~SCOTCH WELD~~ TM ~~AF-163-2~~.
isc 3

9 ~~11-~~

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1 The arrangement as set forth in claim ~~10~~ wherein
said adhesive is contacted with a latent accelerator
selected from the group including tolyl bis(dimethyl urea),
2-ethyl-4-methyl-imidazole and 1-phenyl-3,3-dimethyl urea.

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1 The arrangement as set forth in claim 1 further comprising an interior rearview mirror assembly attached to said mirror mounting button.

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1 The arrangement as set forth in claim ¹⁰~~12~~ wherein said adhesive bond can support a weight greater than or equal to about ²⁰⁰~~300~~ grams.

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1 The arrangement as set forth in claim ¹¹~~13~~ wherein said adhesive is a modified epoxy.

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1 The arrangement as set forth in claim ¹²~~14~~ wherein said adhesive is ~~SCORCH WELD~~TM AF-163-2.

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1 The arrangement as set forth in claim ¹³~~15~~ wherein said adhesive is contacted with a latent accelerator selected from the group including tolyl bis(dimethyl urea), 2-ethyl-4-methyl-imidazole and 1-phenyl-3,3-dimethyl urea.

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1 The arrangement as set forth in claim ¹⁰~~12~~ wherein said mirror mounting button contains a perimetral groove located at the outer perimeter of said button, whereby excess adhesive applied to said button is contained within said groove during bonding of said button to said glass surface.

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1 The arrangement as set forth in claim ¹⁵~~17~~ wherein said adhesive is applied to a receptacle centrally located in said mirror mounting button.

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1 The arrangement as set forth in claim 18 wherein said adhesive bond can support a weight greater than or equal to about 100 grams.

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1 ① The arrangement as set forth in claim 19 wherein said adhesive is a modified epoxy.

18 -21-

1 The arrangement as set forth in claim 20 wherein said adhesive is SCOTCH WELDTM AF-163-2.

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1 The arrangement as set forth in claim 21 wherein said adhesive is contacted with a latent accelerator selected from the group including tolyl bis(dimethyl urea), 2-ethyl-4-methyl-imidazole and 1-phenyl-3,3-dimethyl urea.

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1 A method for attaching a vehicle accessory mounting button to a vehicular windshield during lamination of the windshield panels comprising:

5 (a) providing first and second glass windshield panels having a matched compound curvature, said first panel comprising the interior panel of the two, with a polymeric interlayer between said two panels;

(b) providing a vehicle accessory mounting button;

10 (c) placing an uncured, nonelastomeric, thermosetting, structural adhesive between said mounting button and said first panel, said adhesive having a cure temperature below 325° F and a modulus of elasticity at 85° C of at least about 10,000 psi when cured; and

10 (d) subjecting said entire glass panel/polymeric interlayer/glass panel/structural adhesive/mounting button arrangement to sufficient temperature and pressure to cure said structural adhesive and to laminate said windshield panels.

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1 The method as set forth in claim 23 further comprising the step of attaching a mirror assembly to said mounting button.

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1 The method as set forth in claim 24 wherein said adhesive is a modified epoxy.

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1 The method as set forth in claim 25 wherein said adhesive is SCOTCH-WELDTM AF-163-2.

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1 The method as set forth in claim 26 further comprising the step of contacting said adhesive with a latent accelerator selected from the group including tolyl bis(dimethyl urea), 2-ethyl-4-methyl-imidazole and
5 1-phenyl-3,3-dimethyl urea.

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1 The method as set forth in claim 23 wherein said mounting button contains a perimetral groove located at the outer perimeter of said button.

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1 The method as set forth in claim 28 wherein said placing step comprises the step of applying structural adhesive onto said mounting button whereby excess adhesive applied to said mounting button is contained within said
5 groove during bonding of said button to said glass surface.

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1 The method as set forth in claim 29 wherein said
adhesive is a modified epoxy.

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1 The method as set forth in claim 30 wherein said
adhesive is SCOTCH-WELDTM AF-163-2.

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1 The method as set forth in claim 21 further
comprising the step of contacting said adhesive with a
latent accelerator selected from the group including tolyl
bis(dimethyl urea), 2-ethyl-4-methyl-imidazole and
5 1-phenyl-3,3-dimethyl urea.

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1 The method as set forth in claim 32 wherein said
subjecting step comprises the step of heating said entire
glass panel/polymeric interlayer/glass panel/structural
adhesive/mounting button arrangement to 180° F for 20
5 minutes, 285° F and 100 psi for 20 minutes and cooling to
room temperature.

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1 The method as set forth in claim 23 further
comprising the step of exposing said structural adhesive/
mounting button assembly after application to said interior
panel to from about 10 psi to about 20 psi of pressure at a
5 temperature of from about 40° C to about 50° C.

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1 A mounting button for attaching vehicle
accessories to windshields comprising:

 a tablet-shaped body having one of a planar or a
convex face; and

a groove located around the outer perimeter of said body for containment of excess structural adhesive during bonding of said button to a windshield.

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1 The mounting button as set forth in claim 35 further comprising a receptacle centrally located in said mounting button.